

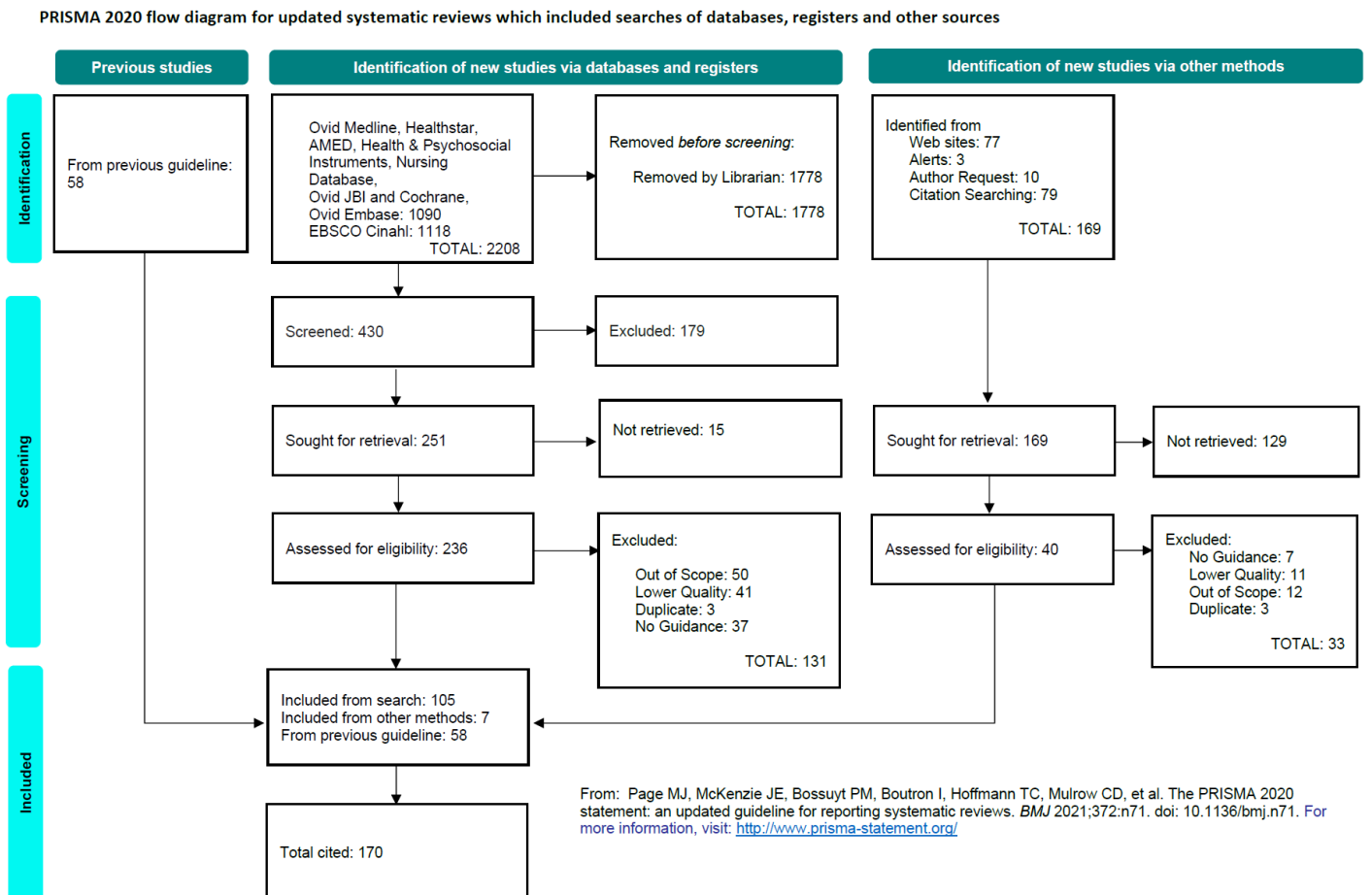
EVIDENCE REVIEW

The Guideline for Environmental Hygiene was approved by the AORN Guidelines Advisory Board and became effective April 9, 2026.

A medical librarian with a perioperative background conducted a systematic search of the databases Ovid MEDLINE®, Ovid Embase®, EBSCO CINAHL®, and the Cochrane Database of Systematic Reviews. The search was limited to literature published in English from January, 2019 through January, 2025. At the time of the initial search, weekly alerts were created on the topics included in that search. Results from these alerts were provided to the lead author until August, 2025. The lead author requested additional articles that either did not fit the original search criteria or were discovered during the evidence appraisal process. The lead author and the medical librarian also identified relevant guidelines from government agencies, professional organizations, and standards-setting bodies.

Included were research and non-research literature in English, complete publications, and publications with dates within the time restriction when available. Historical studies were also included. Excluded were non-peer-reviewed publications and older evidence within the time restriction when more recent evidence was available. Editorials, news items, and other brief items were excluded. Low-quality evidence was excluded when higher-quality evidence was available, and literature outside the time restriction was excluded when literature within the time restriction was available. Articles identified in the search were provided to the project team for evaluation. The team consisted of the lead author and one evidence appraiser. The lead author and the evidence appraiser reviewed and critically appraised each article using the AORN Research or Non-Research Evidence Appraisal Tools as appropriate. A third appraiser was consulted if there was a disagreement between the lead author and the primary evidence appraiser. The literature was independently evaluated and appraised according to the strength and quality of the evidence. Each article was then assigned an appraisal score. The appraisal score is noted in brackets after each reference as applicable. Each recommendation rating is based on a synthesis of the collective evidence, a benefit-harm assessment, and consideration of resource use. The strength of the recommendation was determined using the AORN Evidence Rating Model and the quality and consistency of the evidence supporting a recommendation. The recommendation strength rating is noted in brackets after each recommendation. See the PRISMA 2020 flow diagram (**Figure 1**) below for more information about the systematic review and nature of included studies and resources.

Figure 1: PRISMA 2020 Flow Diagram



On February 6, 2025, a medical librarian with a perioperative background conducted searches for relevant publications on websites of organizations selected by the author (including government departments). Full details of these supplementary searches is included in the Supplementary Content on the aorn.org web site. These results were also screened by two screeners: the medical librarian, and then the lead author.

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On January 21, 2025, a medical librarian with a perioperative background conducted a systematic search of 18 health science databases, the names and date coverage of which are given in **Table 1**. These results were screened by the medical librarian, and then the lead author.

Table 1: Databases searched and coverage

Database	Coverage
AORN Full Text Journals@Ovid	Comprehensive
Books@Ovid	January 23, 2025
JBI EBP Database	Current to January 15, 2024
EBM Reviews: ACP Journal Club	1991 to January 2025
EBM Reviews: Cochrane Central Register of Controlled Trials	December 2024
EBM Reviews: Cochrane Database of Systematic Reviews	2005 to January 22, 2025
EBM Reviews: Cochrane Clinical Answers	January 2025
EBM Reviews: Cochrane Methodology Register	3rd Quarter 2012
EBM Reviews: Database of Abstracts of Reviews of Effects	1st Quarter 2016
EBM Reviews: Health Technology Assessment	4th Quarter 2016
EBM Reviews: NHS Economic Evaluation Database	1st Quarter 2016
AMED (Allied and Complementary Medicine)	1985 to December 2024
Embase	1974 to 2025 January 23
Health and Psychosocial Instruments	1985 to January 2025
Ovid Healthstar	1999 to December 2024
Ovid MEDLINE(R) ALL	1946 to January 23, 2025
Ovid Nursing Database	1946 to January Week 3 2025
CINAHL Complete via EBSCOhost	1937 to Current

Search strategy development process: The medical librarian referred to a search strategy used for the previous Guideline. A draft search strategy was developed using terms listed in the previous strategy and additional search terms identified from a meeting with the lead author. Using the MeSH Subject Headings database, additional search terms were identified and added to the search strategy. The strategy was limited following the constraints in the eligibility criteria outlined by the lead author.

Editor’s note: MEDLINE is a registered trademark of the US National Library of Medicine’s Medical Literature Analysis and Retrieval System, Bethesda, MD. Embase is a registered trademark of Elsevier B.V., Amsterdam, The Netherlands. CINAHL, Cumulative Index to Nursing and Allied Health Literature, is a registered trademark of EBSCO Industries, Birmingham, AL.

Search Strategies

Ovid (Medline, Cochrane, and Embase)

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1	("central supply, hospital" or "operating rooms").de,sh,hw. or ("central processing" or "Central service department" or "Sterile processing" or "Sterile supply" or "operating suites" or surgicenters or (operating and theat\$)).ti,ab,kw. or ("ambulatory surgery" and (center or facility)).ti,ab,kw.	76340
2	((terminal adj1 (cleaning or disinfection or decontamination)) or (cleaning adj1 (program or regimen or schedule or standard or policies or guideline or protocol or routine))).ti,ab,kw. or ("housekeeping, hospital" or "housekeeping department").de,sh,hw. or ("environmental services" or "hospital housekeeping").ti,ab,kw. or (decontamination or disinfection or disinfectants).de,sh,hw. or "room contamination".ti,ab,kw. or ("Environmental microbiology" or "environmental monitoring").de,sh,hw. or ("Environmental cleaning" or "Green cleaning" or "Enhanced environmental cleaning").ti,ab,kw.	514642
3	1 or 2	588279
4	(adenosine triphosphate or detergents or solvents or phenols or "hydrogen peroxide" or "quaternary ammonium compounds" or "sodium hypochlorite" or ozone or silver or detergents or "cleansing agents" or checklist).de,sh,hw. or ("quaternary ammonium disinfectant" or "visual inspection").ti,ab,kw. or ("high touch" adj1 (surfaces or objects)).ti,ab,kw. or (clean\$ng and agent).ti,ab,kw.	1132252
5	("cross infection" or "disease transmission, infectious" or "infection control" or "Gram-negative bacteria" or "Gram-positive bacteria" or Viruses or "Creutzfeldt-Jakob syndrome" or aspergill\$ or fungi or yeasts).de,sh,hw. or fungi/py or yeasts/py or "candida auris"/py or spores/py or ("healthcare associated infection" or "nosocomial infection" or "Surgical wound infection" or "Body fluids" or "Bacterial load" or "Colony count, microbial" or "Creutzfeldt-jakob disease" or "Subacute spongiform encephalopathy" or "Bacterial count" or "Microbial colony count" or mold or fungus or "Candida auris" or "Multidrug resistant organisms").ti,ab,kw. or (prior and (patient or "room occupant" or "previous patient")).ti,ab,kw. or ("blood spill" adj5 deactivat\$).ti,ab,kw.	973884
6	(ultraviolet rays or "luminescent measurements").de,sh,hw. or "hydrogen peroxide"/ae, bl, tu, to or ("Ultra-violet light" or "Ultraviolet light" or "Fluorescent light" or "Bioluminescence detection" or "adjunct disinfection systems" or "germicidal light" or "Visible light disinfection" or IndigoClean).ti,ab,kw. or ((clean\$ adj5 "color additive") and "Highlight").ti,ab,kw. or ("Ultraviolet light" and (continuous or "pulsed xenon" or "focused multivector")).ti,ab,kw. or ("Hydrogen peroxide" and ("environmental surface" or formica or laminate or "stainless steel or ionized" or "dry mist" or vapor)).ti,ab,kw. or UVDI.kw,mv,my,dm.	219655
7	(Microfib\$ or Cloths or "Auto scrubber" or "Environmental surface" or "Contact surface" or "Contact time" or "wet time" or "Dwell time" or "floor care" or vacuum\$ or (change\$ adj3 filter) or ((wax or buffer) and floor)).ti,ab,kw.	203056
8	(dust or Phthiraptera or Siphonaptera or Cockroaches or Diptera or ants).de,sh,hw. or (lice or fleas or vermin or flies or insects or "pest management").ti,ab,kw. or "pest control".de,sh,hw.	383903
9	(beds or "bedding and linens" or "laundry service, hospital" or "disease reservoirs" or fomites).de,sh,hw. or (textiles or mattresses or "privacy curtains" or laundry or "hospital laundry service" or mouse or "operating room tables" or "patient transfer board" or "scrub sink" or "storage areas" or "ice machine" or "heater-cooler" or "patient monitors").ti,ab,kw. or (keyboard adj1 covers).ti,ab,kw.	1961725
10	(occupational adj1 (health or exposure or injuries)).de,sh,hw. or "occupational safety".ti,ab,kw.	394713
11	4 or 5	2091980
12	10 and 11	14130
13	((tacky or sticky) adj1 mat).ti,ab,kw.	5
14	("waste disposal, fluid" or "fluid waste management").ti,ab,kw,de,sh,hw	70799
15	14 and (solidif\$ or "hydrophilic polymer").ti,ab,kw.	91

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16	((decontamination or disinfection or disinfectants).de,sh,hw. or "room contamination".ti,ab,kw.) and "adenosine triphosphate".de,sh,hw.	738
17	"Quality assurance, Health care"/es, st, sn	14177
18	"medically underserved area".de,sh,hw. or "minority population".ti,ab,kw. or "hospitals, urban"/es, st, sn or "hospitals, rural"/es, st, sn or ("city hospitals" or "metropolitan hospitals" or "urban hospitals" or "inner city hospitals").ti,ab,kw.	30804
19	17 and 18	66
20	6 or 7 or 8 or 9	2744706
21	11 and 20	105288
22	12 or 13 or 15 or 16 or 19 or 21	119103
23	3 and 22	8615
24	limit 23 to english language	8066
25	limit 24 to yr="2019 -Current"	2011
26	remove duplicates from 25	1090

EBSCOhost (CINAHL)

S1	MH "Central Service Department" OR ("central processing" or Sterile processing" or "Sterile supply" or "operating suites" or surgicenters) OR ((operating and theat*) OR (("ambulatory surgery" and (center or facility)))	9878
S2	MH "Housekeeping Department" OR ((terminal N1 (cleaning or disinfection or decontamination))) OR ((cleaning N1 (program or regimen or schedule or standard or policies or guideline or protocol or routine))) OR (("environmental services" or "hospital housekeeping" or "room contamination" or "Environmental cleaning" or "Green cleaning" or "Enhanced environmental cleaning"))	1753
S3	S2 OR S1	11604
S4	((MH "Adenosine Triphosphate" OR MH "Hydrogen Peroxide" OR MH "Phenols+" OR MH "Detergents+" OR MH "Solvents+") OR ((MH "Quaternary Ammonium Compounds+" OR MH "Sodium Hypochlorite" OR MH "Ozone" OR MH "Silver")) OR (MH "Checklists") OR (("quaternary ammonium disinfectant" or "visual inspection")) OR (("high touch" N1 (surfaces or objects))) OR ((clean*ng and agent))	102156
S5	((MH "Infection Control+" OR MH "Cross Infection+")) OR ((MH "Disease Transmission+" OR MH "Candida Auris" OR MH "Spores" OR MH "Aspergillosis+")) OR ((MH "Gram-Positive Bacteria+" OR MH "Gram-Negative Bacteria+" OR MH "Viruses+")) OR ((MH "Creutzfeldt-Jakob Syndrome+" OR MH "Yeasts+" OR MH "Fungi+")) OR (("healthcare associated infection" or "nosocomial infection" or "Surgical wound infection" or "Body fluids" or "Bacterial load" or "Colony count, microbial" or "Creutzfeldt-jakob disease" or "Subacute spongiform encepholopathy" or "Bacterial count" or "Microbial colony count" or mold or fungus or "Candida auris" or "Multidrug resistant organisms")) OR ((prior and (patient or "room occupant" or "previous patient"))) OR ("blood spill" N5 deactivat*)	362237
S6	((MH "Ultraviolet Rays" OR MH "Luminescent Measurements+" OR MH "Hydrogen Peroxide/AE/BL/TU")) OR (("Ultra-violet light" or "Ultraviolet light" or "Fluorescent light" or	23936

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	"Bioluminescence detection" or "adjunct disinfection systems" or "germicidal light" or "Visible light disinfection" or IndigoClean)) OR (((clean* N5 "color additive") and "Highlight")) OR (("Ultraviolet light" and (continuous or "pulsed xenon" or "focused multivector")) OR (("Ultraviolet light" and (continuous or "pulsed xenon" or "focused multivector"))) OR (("Hydrogen peroxide" and ("environmental surface" or formica or laminate or "stainless steel" or ionized or "dry mist" or vapor))) OR UVDI	
S7	((Microfib* or Cloths or "Auto scrubber" or "Environmental surface" or "Contact surface" or "Contact time" or "wet time" or "Dwell time" or "floor care" or vacuum* or (change* N3 filter))) OR (((wax or buffer) and floor)))	9398
S8	((MH "Cockroaches" OR MH "Dust" OR MH "Dust Mites" OR MH "Flies" OR MH "Fleas")) OR ((Phthiraptera or ants or lice or fleas or vermin or flies or insects or "pest management")) OR MH "Pest Control+" AND MH "Bedbugs"	18847
S9	MH "Bedding and Linens+" OR MH "Laundry Department")) OR ((beds or "disease reservoirs" or fomites or textiles or mattresses or "privacy curtains" or laundry or "hospital laundry service" or mouse or "operating room tables" or "patient transfer board" or "scrub sink" or "storage areas" or "ice machine" or "heater-cooler" or "patient monitors")) OR (keyboard N1 covers)	156151
S10	((MH "Occupational Exposure" OR MH "Occupational-Related Injuries" OR MH "Occupational Health+")) OR "occupational safety"	119189
S11	S4 OR S5	456787
S12	S11 AND S10	9949
S13	(tacky or sticky) N1 mat	3
S14	MH "Medical Waste Disposal" OR (("fluid waste disposal" or "fluid waste management"))	1888
S15	(solidif* or "hydrophilic polymer")	1065
S16	S14 AND S15	0
S17	((MH "Disinfectants" OR MH "Sterilization and Disinfection+" OR MH "Decontamination, Hazardous Materials" OR "room contamination")) OR MH "Adenosine Triphosphate"	19786
S18	MH "Quality Assurance+/EI/ST/SN"	9503
S19	(MH "Hospitals, Urban/EI/SN/ST" OR MH "Hospitals, Rural/EI/SN/ST" OR MH "Medically Underserved Area") OR "minority population" OR ("city hospitals" or "metropolitan hospitals" or "urban hospitals" or "inner city hospitals")	6192
S20	S17 AND S18	27
S21	S6 OR S7 OR S8 OR S9	202653
S22	S11 AND S20	26
S23	S12 OR S13 OR S16 OR S17 OR S20 OR S22	28817
S24	S3 AND S13	2
S25	S3 AND S17	1436
S26	S12 OR S16 OR S20 OR S22 OR S24 OR S25	11316

S27	S12 OR S16 OR S20 OR S22 OR S24 OR S25	2385
Limits: Peer-reviewed, 12/31/2019-12/31/2024, English		

Web Searches// All searches conducted in 2025.

2/6: Used google.com to navigate to EPA web site (epa.gov). 2] Under "Environmental Topics" menu, chose "Bed Bugs". 3] Under "Popular Topics and Resources," chose "Bed Bug Collaborative Strategy". 4] Saved for author screening.

2/6: From Ref ID 831's web site, chose first link for this document. 2] Saved for author screening.

2/6: Used google.com to navigate to EPA web site (epa.gov). 2] Under "Environmental Topics" menu, chose "Bed Bugs". 3] Under "Get Rid..." chose "Pesticides to Control Bed Bugs". 4] From left navigation, chose "Bed Bug Product Search Tool". 5] Saved for author screening.

2/6: Used google.com to navigate to EPA web site (epa.gov). 2] Under "Environmental Topics" menu, chose "Bed Bugs". 3] Under "Get Rid..." chose "Pesticides to Control Bed Bugs". 4] Saved for author screening.

2/6: Used google.com to navigate to EPA web site (epa.gov). 2] Under "Environmental Topics" menu, chose "Bed Bugs". 3] Under "Learn About..." chose "Bed Bug Information Clearinghouse". 4] Sorted by "Audience" and found under "Health Centers/ Hospitals," 5] Saved for author screening.

2/6: Used google.com to navigate to EPA web site (epa.gov). 2] Under "Environmental Topics" menu, chose "Bed Bugs". 3] Under "Learn About..." chose "Bed Bug Information Clearinghouse". 4] Saved for author screening.

2/6: From Ref ID 830's web site, chose second link for this document. 2] Saved for author screening.

2/6: Used google.com to navigate to EPA web site (epa.gov). 2] Under "Environmental Topics" menu, chose "Bed Bugs". 3] Chose "Public Health Issues" topic after scrolling down. 4] Saved for author screening.

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] Browsed index, chose "eTools." Chose "Surgical Suite" module. 5] From subtopic list, chose "Hazardous Chemicals." 6] Saved for author screening.

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] Browsed index, chose "Clinicians." 5] Saved for author screening.

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] Browsed index, chose "Cleaning Industry" and then "Additional Resources." 4] Saved for author screening.

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] Browsed index, chose "Cleaning Industry" and then "Safety and Health Programs." 4] Saved for author screening.

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] Browsed index, chose "Cleaning Industry" and then "Hazards and Solutions." 4] Saved for author screening.

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] Browsed index, chose "Cleaning Industry" and then "Standards." 4] Saved for author screening.

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] Browsed index, chose "Cleaning Industry." 4] Saved for author screening.

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] Browsed index, chose "Annotated PELs Tables." 4] Saved for author screening.

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] From Index, chose "Chemical Hazards and Toxic Substances." 4] Clicked "Hazard Recognition" from left side. 5] Browsed results, saved for author screening. [x2]

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] From Index, chose "Chemical Hazards and Toxic Substances." 4] Clicked "Additional Resources" from left side. 5] Saved for author screening.

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] From Index, chose "Chemical Hazards and Toxic Substances." 4] Clicked "Standards" from left side. 5] Saved for author screening.

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] From Index, chose "Chemical Hazards and Toxic Substances." 4] Saved for author screening.

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] From Index, chose "Chemical Hazards and Toxic Substances." 4] Chose "Transitioning to Safer Chemicals: A Toolkit for Employers and Workers" from box on right. 5] Clicked "Explore the Steps" from Toolkit components on left side. 6] Saved for author screening.

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] From Index, chose "Chemical Hazards and Toxic Substances." 4] Chose "Transitioning to Safer Chemicals: A Toolkit for Employers and Workers" from box on right. 5] Clicked "Why transition..." from Toolkit components on left side. 6] Saved for author screening.

2/7 Used google.com to navigate to osha.gov. 2] From top right of page, chose "A to Z Index." 3] From Index, chose "Chemical Hazards and Toxic Substances." 4] Chose "Transitioning to Safer Chemicals: A Toolkit for Employers and Workers" from box on right. 5] Saved for author screening.

2/7 Used google.com to navigate to epa.gov. 2] Under the "Environmental Topics" drop-down menu, chose "Chemicals, Toxics, and Pesticide." 3] Under "Pest Management," chose "National Pesticide Information Center." 4] Entered "hospital" in search bar. 5] Chose "Toxicology and Health Effects of Antimicrobials" from results. 6] Scrolled to Additional Resources. 7] Saved for author screening. [x2]

2/7 Used google.com to navigate to epa.gov. 2] Under the "Environmental Topics" drop-down menu, chose "Chemicals, Toxics, and Pesticide." 3] Under "Pest Management," chose "National Pesticide Information Center." 4] Entered "hospital" in search bar. 5] Chose "Disinfectants, Sanitizers, and Antimicrobial Products" from results. 6] Chose "Selecting an Antimicrobial Product". 7] Scrolled text, clicked "sterilizer, disinfectant or sanitizer," which brought me to "What are Antimicrobial Pesticides?" 8] Saved for author screening.

2/7: Used google.com to navigate to epa.gov. 2] Under the "Environmental Topics" drop-down menu, chose "Chemicals, Toxics, and Pesticide." 3] Scrolled topics, chose "ChemView." 4] Saved for author screening.

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2/7: Used google.com to navigate to epa.gov. 2] Under the "Environmental Topics" drop-down menu, chose "Chemicals, Toxics, and Pesticide." 3] Scrolled topics, chose "Disinfectants for Coronavirus (COVID-19)." 4] Saved for author screening.

2/7: Used google.com to navigate to epa.gov. 2] Under the "Environmental Topics" drop-down menu, chose "Chemicals, Toxics, and Pesticide." 3] Scrolled topics, chose "Mercury." 4] Under "Products that Contain Mercury," chose "CFL and other...". 5] Browsed results on page, saved for author screening.

2/7: Used google.com to navigate to epa.gov. 2] Under the "Environmental Topics" drop-down menu, chose "A-Z Topic Index." 3] Scrolled topics, chose "Formaldehyde." 4] Under "Laws and Regulations," chose "Other laws...". 5] Under "Clean Water Act," clicked on "View additional resources." 6] Browsed results on page, saved for author screening.

2/7: Used google.com to navigate to epa.gov. 2] Under the "Environmental Topics" drop-down menu, chose "A-Z Topic Index." 3] Scrolled topics, chose "Formaldehyde." 4] Under "Laws and Regulations," chose "Other laws...". 5] Browsed results on page; saved for author screening.

2/7: Used google.com to navigate to epa.gov. 2] Under the "Environmental Topics" drop-down menu, chose "A-Z Topic Index." 3] Scrolled topics, chose "Formaldehyde." 4] Under "Laws and Regulations," chose "Other laws...". 5] Browsed results on page; saved for author screening. [x2]

2/11 Used google.com to navigate to Clean Hospitals site given to me by author (<https://cleanhospitals.com/the-organization/about-us/>). 2] Under "Library" drop-down menu, expanded "General Guidelines and Recommendations." 3] Saw additional useful resources on this web site, browsed results, saved for author screening. [x8]

2/11 Used google.com to navigate to Clean Hospitals site given to me by author (<https://cleanhospitals.com/the-organization/about-us/>). 2] Under "Library" drop-down menu, expanded "General Guidelines and Recommendations." 3] Browsed results, saved for author screening.

2/11 Used google.com to navigate to Clean Hospitals site given to me by author (<https://cleanhospitals.com/the-organization/about-us/>). 2] Under "Library" drop-down menu, expanded "Sterilization." 3] Browsed results, saved for author screening.

2/11 Used google.com to navigate to Clean Hospitals site given to me by author (<https://cleanhospitals.com/the-organization/about-us/>). 2] Under "Library" drop-down menu, expanded "Surfaces." 3] Browsed results, saved for author screening. [x6]

2/11: Used Google Scholar.com to navigate to acgih.org 2] Clicked on the "Publications" link on the menu bar. 3] Scrolled down to the link for "Downloadable TLV and BEI Documentation.." 4] Browsed results, saved for author review. [x3]

2/11 Used google.com to navigate to APIC (Association for Professionals in Infection Control and Epidemiology). 2] Under "Professional Practice" drop-down menu, chose "Scientific guidelines." 3] Browsed resources; saved for author screening.

2/11 While searching for an AAMI book (Guidance on ultraviolet (UV) disinfection for medical devices), found within results. 2] Obtained citation for most recent version, saved for author screening.

2/11 Used google.com to search for "ultraviolet disinfection hospitals." 2] Browsed results. 3] Saved for author screening. [x6]

2/11 Used google.com to navigate to the International Commission on Non-Ionizing Radiation Protection, icnirp.org. 2] From top navigation, chose "Publications." 3] Under results, refined by "Frequencies", and chose "UV (100-400nm)." 4] Browsed results. 5] Saved for author screening.

2/11 Used google.com to navigate to fda.gov. 2] Typed "ultraviolet" in to the search bar, and it completed with "-c" for a search of "ultraviolet-c." 3] Chose first result, for "FDA In Brief: FDA Warns Consumers of Risk of Exposure to Unsafe Levels of Radiation with Safe-T-Lite UV WAND." 4] Scrolled to bottom of page; browsed results. 5] Saved for author screening.

2/11 Used google.com to navigate to fda.gov. 2] Typed "ultraviolet" in to the search bar, and it completed with "-c" for a search of "ultraviolet-c." 3] Chose first result, for "FDA In Brief: FDA Warns Consumers of Risk of Exposure to Unsafe Levels of Radiation with Safe-T-Lite UV WAND." 4] Saved for author screening.

2/11 Used google.com to navigate to fda.gov. 2] Typed "ultraviolet" in to the search bar, and it completed with "-c radiation disinfection" for a search of "ultraviolet-c radiation disinfection." 3] Chose first result, for "Beware of Ultraviolet (UV) Wands That Give Off Unsafe Levels of Radiation." 4] Scrolled to bottom of page; browsed results. 5] Saved for author screening.

2/11 Used google.com to navigate to fda.gov. 2] Typed "ultraviolet" in to the search bar, and it completed with "-c radiation disinfection" for a search of "ultraviolet-c radiation disinfection." 3] Chose first result, for "Beware of Ultraviolet (UV) Wands That Give Off Unsafe Levels of Radiation." 4] Saved for author screening.

2/12 Used google.com to navigate to Association for Healthcare Environment, ahe.org. 2] Scrolled to mid-page, clicked on "Browse Resources." 3] Filtered results to just see "Guides/ Reports." 4] Browsed results; saved for author screening. [x2]

2/12 Used google.com to navigate to Association for Healthcare Environment, ahe.org. 2] Scrolled to mid-page, clicked on "Browse Resources." 3] Filtered results to just see "Other Resources." 4] Browsed results; saved for author screening.

2/12 Used google.com to navigate to Association for Healthcare Environment, ahe.org. 2] Scrolled to mid-page, clicked on "Browse Resources." 3] Filtered results to just see "Magazine & Journal Articles." 4] Browsed results; saved for author screening. [x4]

9/8: Author request for more info on whole room microbial reduction devices from FDA. 2] From Product Classification page on fda.gov, noticed regulation number listed. 3] Navigated to govinfo.gov and searched for 21 CFR 880.6500/ Most recent version. 4] Saved for author review.

RESULTS

Studies that offer insights that can inform perioperative nursing practice in the area of environmental hygiene and maintaining a sanitary environment were included in this review. Studies that appeared to meet the inclusion criteria were excluded if they were of lower quality, provided no guidance, were duplicates of already-included studies, full text was not available in English, the results were not applicable or generalizable to the perioperative practice setting, were the wrong setting, or wrong population. A synthesis of the study results informed the articulation of practice recommendations. This evidence synthesis is described briefly in the corresponding rationales that follow each practice recommendation. Additional information about each included study is found in the evidence table that corresponds to the published guideline.

PUBLICATION HISTORY

- Originally published June 1975, AORN Journal, as “Recommended practices for sanitation in the surgical practice setting”
- Format revised March 1978; March 1982; July 1982
- Revised April 1984
- Revised November 1988
- Revised December 1992
- Revised June 1996; published October 1996, AORN Journal
- Reformatted July 2000
- Revised; published December 2002, AORN Journal
- Revised 2007; published in Perioperative Standards and Recommended Practices, 2008 edition
- Minor editing revisions made to omit PND codes; reformatted September 2012 for publication in Perioperative Standards and Recommended Practices, 2013 edition
- Revised September 2013 for online publication in Perioperative Standards and Recommended Practices
- Minor editing revisions made in November 2014 for publication in Guidelines for Perioperative Practice, 2015 edition
- Evidence ratings revised in Guidelines for Perioperative Practice, 2018 edition, to conform to the revised AORN Evidence Rating Model
- Revised 2019 for publication in Guidelines for Perioperative Practice, 2020 edition
- Revised 2026 for publication in Guidelines for Perioperative Practice, 2027 edition
- Scheduled for review in 2031